

parallel passages through which the free end portions of the wires are inserted prior to compressing the metal tube to a smaller diameter, and the distal end portion of the tube has an internal shoulder which bears against an end of the mineral insulation material prior to compressing the metal tube to a smaller diameter.

30. The device of claim 29 wherein the sensor element has a pair of leads that are inserted into the passages in the mineral insulation material along with the free end portions of the wires prior to compressing the metal tube to a smaller diameter, whereby during such compression, the compaction of the mineral insulation material around the wires ensures good electrical contact between the free ends of the wires and the leads.

31. The device of claim 28 wherein the distal end portion of the tube is packed with additional mineral insulation material around the sensor element.

32. The device of claim 31 wherein the distal end portion of the tube is welded closed.

33. A temperature sensing device comprising a pair of electrically conductive wires made of dissimilar metals, a compactable mineral insulation material surrounding free end portions of the wires, the free end portions of the wires being joined together to form a hot junction, and a metal tube covering the mineral insulation material and the free end portions of the wires and the hot junction, the tube having an initial internal size to permit insertion over the mineral insulation material and being compressed to a smaller diameter thereby to compact the mineral insulation material tightly around the free end portions of the wire.

34. A temperature sensing device comprising a pair of electrically conductive wires, a compactable mineral insulation material surrounding free end portions of the wires, temperature sensing means electrically connected to the free end portions of the wires, and a metal tube covering the mineral insulation material and the free end portions of the wires, the tube having an initial internal size to permit insertion over the mineral insulation material and being compressed to a smaller diameter thereby to compact the mineral insulation material tightly around the free end portions of the wires.

35. The device of claim 34 wherein the metal tube includes a distal end